

Exposure Dose Distribution of the Workers at Fukushima Daiichi Nuclear Power Plant

(Updated on 31 Jan 2024)

1 Radiation Exposure Dose Distributions

(1) The distribution of external exposure dose of the workers during the last 3 months

(Numbers of workers who entered each area every month)

Effective dose (E) mSv	October-2023			November-2023			December-2023		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	0	0	0	0	0	0	0	0
10<E≤20	0	1	1	0	1	1	0	2	2
5<E≤10	0	45	45	0	61	61	0	57	57
1<E≤5	13	612	625	9	499	508	22	548	570
E≤1	1057	6127	7184	1059	6326	7385	1015	6356	7371
Total	1070	6785	7855	1068	6887	7955	1037	6963	8000
Maximum (mSv)	3.90	10.10	10.10	2.90	11.60	11.60	4.06	11.34	11.34
Average (mSv)	0.07	0.36	0.32	0.07	0.34	0.30	0.09	0.33	0.30

(*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(2) Combined Cumulative Effective Dose from April 2021 (Internal and External)

Effective dose (E) mSv	April 2021 - November 2023			April 2021 - December 2023			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	1	1	0	1	1
20<E≤50	16	842	858	20	883	903	4	41	45
10<E≤20	51	1536	1587	49	1580	1629	-2	44	42
5<E≤10	102	1478	1580	101	1513	1614	-1	35	34
1<E≤5	336	2574	2910	344	2614	2958	8	40	48
E≤1	1233	7475	8708	1229	7548	8777	-4	73	69
Total	1738	13905	15643	1743	14139	15882	5	234	239
Maximum (mSv)	28.02	49.82	49.82	29.64	50.50	50.50	-	-	-
Average (mSv)	1.63	4.66	4.33	1.68	4.75	4.41	-	-	-

(*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(3) Combined Cumulative Effective Dose from April 2023

Effective dose (E) mSv	April 2023 - November 2023			April 2023 - December 2023			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	0	0	0	0	0	0	0	0
10<E≤20	1	462	463	1	552	553	0	90	90
5<E≤10	11	827	838	22	958	980	11	131	142
1<E≤5	144	1726	1870	147	1879	2026	3	153	156
E≤1	1221	6460	7681	1213	6369	7582	-8	-91	-99
Total	1377	9475	10852	1383	9758	11141	6	283	289
Maximum (mSv)	10.10	16.40	16.40	10.33	16.55	16.55	-	-	-
Average (mSv)	0.39	1.82	1.64	0.46	2.00	1.81	-	-	-

(*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(4) Distribution of sum of external exposure dose and internal exposure dose of workers engaged in specified high-dose work

(Specified high-dose work has not been performed since October 2015.)

Effective dose (E) mSv	March 2011 - September 2015
100<E	1
75<E≤100	191
50<E≤75	233
20<E≤50	267
10<E≤20	186
5<E≤10	129
1<E≤5	145
E≤1	51
Total	1203
Maximum (mSv)	102.69
Average (mSv)	36.49

(As specified high-dose work has not been performed since October 2015, the table shows the data up to September 2015.)

(*) Workers engaged in work to which dose limit (100 mSv) during emergency work is applied in line with Article 7 of the Ordinance on Prevention of Ionizing Radiation Hazards.

Specifically, these workers are those who are engaged in work to maintain the functions of a nuclear reactor facility or spent fuel storage pool, or in work to maintain functions to suppress or prevent the possible release of a large amount of radioactive materials due to a failure of or damage to the nuclear reactor facility at a location around the nuclear reactor facility, steam turbine, or accessory facility where hourly dose may exceed 0.1 mSv.

It should be noted that only TEPCO employees have so far been engaged in specified high-dose work.

(*) The number of workers engaged in specified high-dose work is that of workers who were registered as such at

least once during the period between March 2011 and September 2015.

- (*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).
- (*) The results of re-evaluating committed doses in March 2011 reveal that maximum cumulative effective doses for the period between March 2011 and September 2015 exceeded 100.